

II. CLAIM AMENDMENTS

1. (Cancelled)
2. (Currently Amended) A system for matching an antenna for a wireless communication device, **characterized** in that it comprises:
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detecting means (4, 5, 12) to detect the matching of the antenna {ANT} by measuring a distance the radio power reflected from the antenna {ANT} and means (6) to generate a matching signal on the basis of the distance measurement on the reflected radio power,
- control means (7) to examine said matching signal, to determine the need for matching, and to generate a control signal on the basis of said matching signal, and
- antenna matching means (9) to adjust the matching of the antenna {ANT} on the basis of said control signal.
3. (Cancelled)
4. (Cancelled)
5. (Currently Amended) A wireless communication device {MS} comprising at least an antenna {ANT}, **characterized** in that the wireless communication device {MS} also comprises:

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detecting means ~~(4, 5, 12)~~ to detect the matching of the antenna ~~(ANT)~~ by measuring a distance ~~the radio power reflected from the antenna (ANT)~~ and means ~~(6)~~ to generate a matching signal on the basis of the distance measurement ~~on the reflected radio power~~,

control means ~~(7)~~ to examine said matching signal, to determine the need for matching, and to generate a control signal on the basis of said matching signal, and

antenna matching means ~~(9)~~ to adjust the matching of the antenna ~~(ANT)~~ on the basis of said control signal.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The wireless communication device ~~(MS)~~ according to claim 5 ~~7~~, characterized in that said means ~~(12)~~ to measure a distance comprise an infrared transmitter ~~(12a)~~ and an infrared receiver ~~(12b)~~.

9. (Currently Amended) The wireless communication device ~~(MS)~~ according to claim 5, in which the antenna ~~(ANT)~~ is arranged to be placed in at least two different positions, characterized in that said detecting means ~~(4, 5, 12)~~ comprise means ~~(12)~~ to examine the position of the antenna to generate said matching signal (ANT) and means ~~(6)~~ to generate the matching signal on the basis of the position of the antenna ~~(ANT)~~.

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10. (Cancelled)

11. (Cancelled)

12. (Currently Amended) A method for matching the antenna of a wireless communication device, **characterized** in that in the method, the matching of the antenna {ANT} is detected by measuring ~~the radio power reflected from the antenna~~ a distance {ANT}, a matching signal is generated on the basis of the detected matching, said matching signal is examined to determine the need for matching the antenna {ANT}, wherein a control signal is generated on the basis of said matching signal, and the matching of the antenna {ANT} is adjusted on the basis of said control signal.

13. (Cancelled)

14. (Previously Amended) The method according to claim 12, **characterized** in that said matching signal is generated by measuring the distance of the wireless communication device from objects in the vicinity of the wireless communication device at the time.

15. (Currently Amended) The method according to claim 12, in which the antenna {ANT}—can be placed in at least two different positions, **characterized** in that for generating said matching signal, the position of the antenna {ANT} is examined.